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10/789,766	02/27/2004	Pallavur Sankaranarayanan	2454	1895

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EXAMINER
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ALIA, CURTIS A

ART UNIT	PAPER NUMBER
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2616

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02/22/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

Application No.

10/789,766

Applicant(s)

SANKARANARAYANAN ET AL.

Examiner

Curtis Alia

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 29 November 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11-18 and 20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-18 and 20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 November 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Amendment***

Applicant's amendment filed on 29 November 2007 has been entered. Claims 9 and 19 have been cancelled and claims 1 and 12 have been amended. Claims 1-8, 10-18 and 20 are still pending in this application, with claims 1 and 12 being independent.

### ***Drawings***

1. The drawings were received on 29 November 2007. These drawings are acceptable.

### ***Claim Rejections - 35 USC § 103***

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
3. Claims 1-7, 9, 11-13, 15, 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt et al. (previously cited US 2002/0151302) in view of Stamp et al. (previously cited "IP Centrex Creates New Opportunities for Equipment Manufacturers," 2001) and Begeja et al. (newly cited US 5,912,963).

For claim 1, Schmidt discloses a method operable within a system of the type in which an enterprise network that provides connectivity between a plurality of enterprise telephone stations (see figure 1, primary service gateway 102-1 and CPEs 1-n) wherein a landline connection extends between the enterprise network and a packet-switched network (see figure 1, broadband connection 106), the method comprising detecting failure on the landline connection (see paragraph 15, lines 1-4), in response to detecting the failure of the landline connection, invoking a wireless wide area network connection between the enterprise network and the packet-switched

network to allow continued passage of the packet-based signaling between the enterprise network and the call server (see paragraph 5, lines 1-6).

Schmidt does not explicitly teach that a call server sits on the packet switched network and engages in packet-based signaling with the enterprise network to set up calls inside the enterprise network between the enterprise telephone stations. Stamp, from the same field of endeavor, teaches the provision of using an IP-based Centrex server as a centralized call server on a packet-based network accessible by the customer premises (see paragraph 1, lines 15-17 and figure, connection between Network Gateway E and Router via broadband connection to managed IP or ATM network).

Schmidt and Stamp do not explicitly teach that the method further restricts outside calling via the WWAN connection. Begeja, from the same field of endeavor, teaches the provision of using a backup telephone system capable of employing a media selection device that is user programmable for the purpose of selecting rules to define which telephone calls will be patched through to a specific line (whether backup, or local loop), whether it be a local call, long distance, emergency call, etc. (see column 3, lines 16-27 and column 6, lines 35-49). Thus, it would have been obvious to a person having ordinary skill in the art at the time of the invention to be able to program the router/gateway of Schmidt to selectively route or disallow certain calls based on certain criteria. The motivation to combine the programming functionality of Begeja into the router/gateway of Schmidt is that the cost of a call that is normally cheap on the landline may be too expensive through the backup system.

For claim 2, Schmidt discloses that the WWAN connection comprises a cellular radiocommunication system (see paragraph 18, lines 1-8).

For claim 3, Schmidt discloses that invoking the WWAN connection comprises using a WWAN modem to acquire connectivity with the packet-switched network (see figure 1, wireless communication device 114-1 comprises a modem capable of acquiring connectivity with the wireless network).

For claim 4, Schmidt discloses that the enterprise network includes a router that routes the packet-based signaling to the packet-switched network, and wherein detecting the failure comprises the router detecting the failure (see figure 1, primary service gateway 102-1 and monitor 103).

For claim 5, Schmidt discloses that the enterprise network includes a router that has a first mode in which the router routes traffic over the landline connection (see paragraph 4, lines 4-7) and a second mode in which the router routes traffic over the WWAN connection (see paragraph 5, lines 1-6), wherein invoking the WWAN connection comprises the router switching from the first mode to the second mode (see figure 3, 304-308).

For claim 6, Schmidt discloses that the router is coupled with a WWAN modem, and wherein invoking the WWAN connection comprises the router sending data to the WWAN modem (see figure 1, gateway 102-1 directly connected to wireless modem 114-1 for connecting CPEs 1-n for wireless connectivity).

For claim 7, Schmidt teaches all of the limitations with the exception that the call server comprises an IP Centrex server. Stamp teaches the provision of using an IP-based Centrex server as a centralized call server on a packet-based network accessible by the customer premises (see paragraph 1, lines 15-17 and figure, connection between Network Gateway E and Router via broadband connection to managed IP or ATM network). Thus, it would have been obvious to a

person having ordinary skill in the art at the time of the invention to employ a central exchange service capable of setting up calls between customer premise equipment and also to calls outside the network. This combination is possible by using IP telephones or analog telephones connected to a VoIP gateway in the enterprise network so as to format the data as needed by a central office switch in the Centrex server. The motivation for combining these features is that a Centrex server is much more cost effective and easier to maintain for a business/customer with a small quantity of equipment (see paragraph 2).

For claim 9, Begeja discloses using the media selection device to program the behavior of specific calls, such as 911 calls in a telephone backup method (see column 3, lines 16-27 and column 6, lines 35-49). Thus, it would have been obvious to a person having ordinary skill in the art at the time of the invention to allow emergency calls to go through the WWAN connection of Schmidt.

For claim 11, Begeja discloses using the media selection device to program the behavior of specific calls, such as local calls, long distance calls, 911 calls, etc. in a telephone backup method (see column 3, lines 16-27 and column 6, lines 35-49). Thus, it would have been obvious to a person having ordinary skill in the art at the time of the invention to program the gateway/router to allow emergency calls to go through the WWAN connection of Schmidt, but disallow long distance calls.

For claim 12, Schmidt discloses a system comprising an enterprise network that provides connectivity between a plurality of enterprise telephone stations, wherein the enterprise network is coupled by a landline connection with a packet-switched network (see figure 1, broadband connection 106), a wireless wide area network modem for providing a WWAN backup link

between the enterprise network and the packet-switched network (see figure 1, wireless communication device 114-1 comprises a modem capable of acquiring connectivity with the wireless network), and routing logic, operable upon failure of the landline connection to route the packet-based signaling via the WWAN backup link between the enterprise network and the packet-switched network, so as to allow continued setup of calls inside the enterprise network between the enterprise telephone stations (see paragraph 5, lines 1-6).

Schmidt does not explicitly teach that the call server on the packet-switched network engages in packet-based signaling with the enterprise network to set up calls inside the enterprise network between the enterprise telephone stations. Stamp teaches the provision of using an IP-based Centrex server as a centralized call server on a packet-based network accessible by the customer premises (see paragraph 1, lines 15-17 and figure, connection between Network Gateway E and Router via broadband connection to managed IP or ATM network). Thus, it would have been obvious to a person having ordinary skill in the art at the time of the invention to employ a central exchange service capable of setting up calls between customer premise equipment and also to calls outside the network. This combination is possible by using IP telephones or analog telephones connected to a VoIP gateway in the enterprise network so as to format the data as needed by a central office switch in the Centrex server. The motivation for combining these features is that a Centrex server is much more cost effective and easier to maintain for a business/customer with a small quantity of equipment (see paragraph 2).

Schmidt and Stamp do not explicitly teach that the improvement also comprises call-server logic for restricting outside calling via the WWAN backup link. Begeja teaches the provision of using a backup telephone system capable of employing a media selection device that

is user programmable for the purpose of selecting rules to define which telephone calls will be patched through to a specific line (whether backup, or local loop), whether it be a local call, long distance, emergency call, etc. (see column 3, lines 16-27 and column 6, lines 35-49). Thus, it would have been obvious to a person having ordinary skill in the art at the time of the invention to be able to program the router/gateway of Schmidt to selectively route or disallow certain calls based on certain criteria. The motivation to combine the programming functionality of Begeja into the router/gateway of Schmidt is that the cost of a call that is normally cheap on the landline may be too expensive through the backup system.

For claim 13, Schmidt discloses that the enterprise network comprises a router having the routing logic (see figure 1, 102-1), and the routing logic defines a primary static route via the landline connection (see figure 1, broadband connection 106).

For claim 15, Schmidt discloses that the WWAN modem establishes the WWAN backup link via a cellular radiocommunication system (see paragraph 18, lines 1-8).

For claim 17, Schmidt does not explicitly teach that the call server comprises an IP Centrex server. Stamp teaches the provision of using an IP-based Centrex server as a centralized call server on a packet-based network accessible by the customer premises (see paragraph 1, lines 15-17 and figure, connection between Network Gateway E and Router via broadband connection to managed IP or ATM network). Thus, it would have been obvious to a person having ordinary skill in the art at the time of the invention to employ a central exchange service capable of setting up calls between customer premise equipment and also to calls outside the network. This combination is possible by using IP telephones or analog telephones connected to a VoIP gateway in the enterprise network so as to format the data as needed by a central office



switch in the Centrex server. The motivation for combining these features is that a Centrex server is much more cost effective and easier to maintain for a business/customer with a small quantity of equipment (see paragraph 2).

For claim 20, Begeja discloses using the media selection device to program the behavior of specific calls, such as local calls, long distance calls, 911 calls, etc. in a telephone backup system (see column 3, lines 16-27 and column 6, lines 35-49). Thus, it would have been obvious to a person having ordinary skill in the art at the time of the invention to program the gateway/router to allow emergency calls to go through the WWAN connection of Schmidt, but disallow long distance calls.

4. Claims 8 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt in view of Stamp and Begeja as applied to claims 1 and 12 above, and further in view of Faccin et al. (newly cited US 2002/0120759).

For claim 8, Schmidt, Stamp and Begeja do not explicitly teach that the packet-based signaling comprises Session Initiation Protocol (SIP) signaling. Faccin teaches the provision of using SIP in a packet-based voice network, specifically IP telephony (see paragraphs 21 and 22). Thus, it would have been obvious to a person having ordinary skill in the art at the time of the invention to use SIP signaling for establishing calls on the packet-based network of Schmidt and Stamp. Each CPE would be running SIP software to enable it to perform the proper SIP signaling with the packet network. The motivation to combine these teachings is that SIP adds functionality to a packet-based telephone network such as conferencing, call forwarding, voice mailbox, caller ID, etc.

For claim 18, Schmidt, Stamp and Begeja do not explicitly teach that the packet-based signaling comprises Session Initiation Protocol (SIP) signaling. Faccin teaches the provision of using SIP in a packet-based voice network, specifically IP telephony (see paragraphs 21 and 22). Thus, it would have been obvious to a person having ordinary skill in the art at the time of the invention to use SIP signaling for establishing calls on the packet-based network of Schmidt and Stamp. Each CPE would be running SIP software to enable it to perform the proper SIP signaling with the packet network. The motivation to combine these teachings is that SIP adds functionality to a packet-based telephone network such as conferencing, call forwarding, voice mailbox, caller ID, etc.

5. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt in view of Stamp and Begeja as applied to claims 1 and 12 above, and further in view of Nascimento, Jr. (newly cited US 2002/0193107).

For claim 14, Schmidt teaches that the system uses the landline as the primary route and the WWAN connection as the secondary route. However, Schmidt, Stamp and Begeja do not explicitly teach that the routing logic defines the primary static route as a lower cost route than the secondary static route. Nascimento, from the same field of endeavor, teaches the provision of controlling a switching mechanism in accordance with the cost rate structures of a wire line network and a wireless network (see paragraph 6). Thus, it would have been obvious to a person having ordinary skill in the art at the time of the invention to use the lower cost connection as a primary connection and use the higher cost connection as a backup. The motivation to combine these teachings is that this setup makes it cost effective for the customer.

6. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Schmidt in view of Stamp and Begeja as applied to claims 1 and 12 above, and further in view of Dorenbosch et al. (newly cited US 6,757,269).

For claim 16, Schmidt, Stamp and Begeja do not explicitly teach that the WWAN modem is integrated within the router. Dorenbosch, from an analogous art, teaches a mobile wireless router comprising a wireless transceiver for connecting to a cellular telephone system, a conventional network interface capable of connecting to such network devices as wired Fast Ethernet, 802.11 wireless LAN, Bluetooth, etc. (see column 1, line 57 to column 2, line 17 and figure 1). Thus, it would have been obvious to a person having ordinary skill in the art at the time of the invention to integrate a router capable of connecting multiple network devices into a WWAN modem. The motivation to combine these teachings is that multiple devices, not only telephones, but printers, other mobile phones, and PCs can be connected into the network to receive packet-based communication through the backup wireless system.

#### ***Response to Arguments***

7. Rejection of claims 1-20 based on 35 U.S.C. 112, second paragraph is withdrawn in view of applicant's amendment to claims 1 and 12. However, claims 1-9, 11-18 and 20 are still rejected under prior art rejections above.

#### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Art Unit: 2616

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Curtis Alia whose telephone number is (571) 270-3116. The examiner can normally be reached on Monday through Friday, 8am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on (571) 272-7629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CAA

  
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SUPERVISORY PATENT EXAMINER

2/18/08